

HOTRACO HELPS



ORION-FWS

Computer for feed weighing

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General

The Orion-FWS is a computer for controlling a feed weigher that serves the feed to one or more houses. The Orion-FWS-M or Orion-FWS-S can be applied when respectively a mixing weigher or silo weigher is being used.

The Orion-FWS is a stand alone computer. Multiple feed types (max 9) can be mixed by means of a mixing ratio. With the Orion-FWS you can use curves at important settings, when for example the feed distribution is automatically adjusted to the age of the animals.

Internal / external houses

The Orion-FWS controls internal and/or external houses. The external houses are controlled via the Orion-FWS through an Orion-P poultry computer with build in feed distribution control. The Orion-FWS controls the feed and water consumption in the internal houses. When a feed weigher is used, the feed consumption is measured and automatically subtracted from the silo content. Therefore, you always have up to date information about the supply of feed.

Multiple feed types


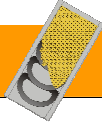

When making use of multiple feed types, one or more feed types might run out. In that case the Orion-FWS can be set to:

- Replace the feed type (no alarm)
- Ignore the feed type (no alarm)
- Not to replace the feed type, (alarm, feeding is stopped)

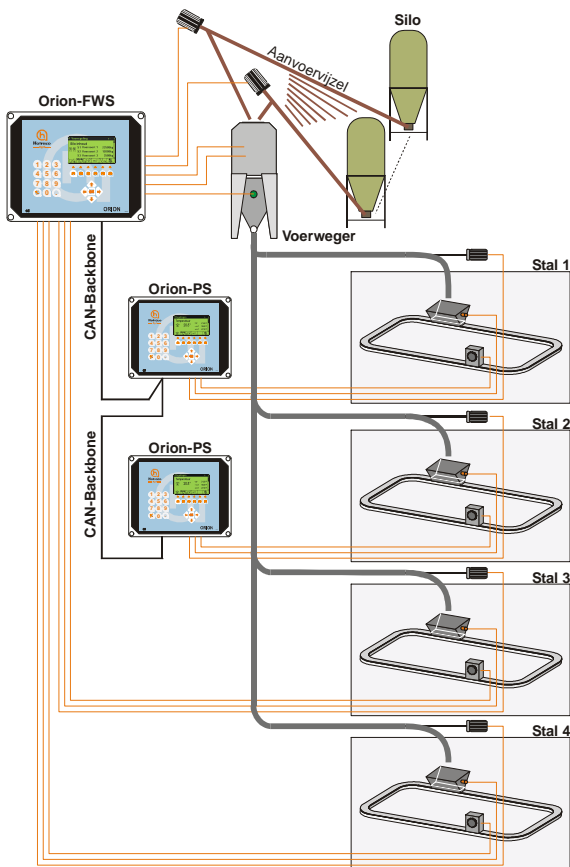
Silo

If your feed supplier has filled up the silo then you can enter the supplied amount of feed into the Orion-FWS computer, the supplied amount is then added to the actual silo contents. When the silo content is under the minimum alarm level, the Orion-FWS will give a warning. For each silo you can enter which feed type is in the silo

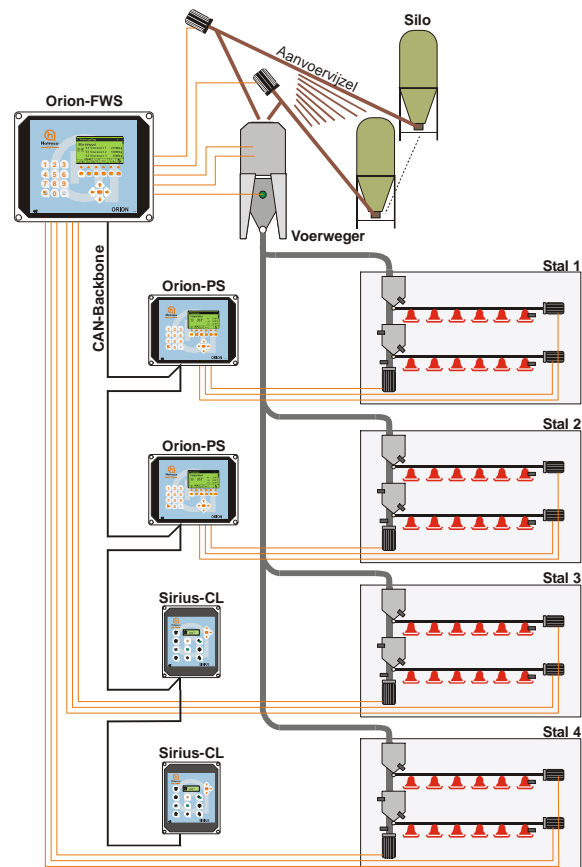
Feed/water distribution control

Feed pans 	Feed chains 	Water distribution 
● On / off times	● Start /run time	● On / off times
● Quantity per feeding time	● Quantity per feeding time	● Quantity per starting time
● Quantity per day	● Quantity per day	● Quantity per day

Different Orion-FWS configurations



- Orion-FWS feeding chains
- Two internal and two external houses
- Climate control in two houses by means of Orion-PS, in remaining houses by means of climate computer X



- Orion-FWS feeding pans and hoppers
- Two internal and two external houses
- Climate control by means of two Orion-PS computers and two Sirius-CL climate computers

Management

A number of data is collected in the management group and can be displayed at any given time. Such as: feed consumption, up to date silo content and feed type per silo. The water / feed consumption per house is registered (today, yesterday and the day before yesterday). Also the total consumption is registered.

Alarm

The Orion can trigger a “hard” or a “soft” alarm. The “soft” alarm shows an alarm description on the flashing display while a “hard” alarm opens the additional alarm contact. The alarm calls that have been solved are stored into the alarm history and also their starting and finishing times.

Diagnosis

In the diagnosis group additional functions with extra information can be retrieved. For example: the status of the feed weigher release valve and the receiving bin sensor at feed weigher level. At house level you can retrieve for example the status of the feeding lines.

Communication

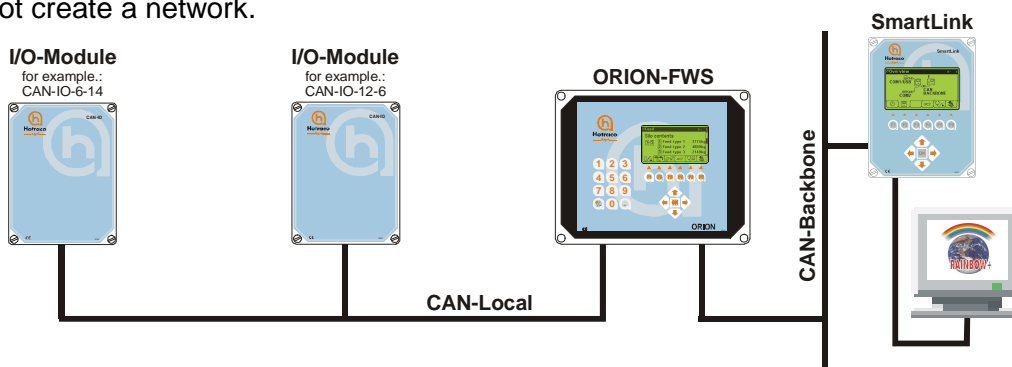
The Orion uses different communication protocols:

- Can-Backbone protocol
- Can-Local protocol
- RS232 protocol

Communication with other computers

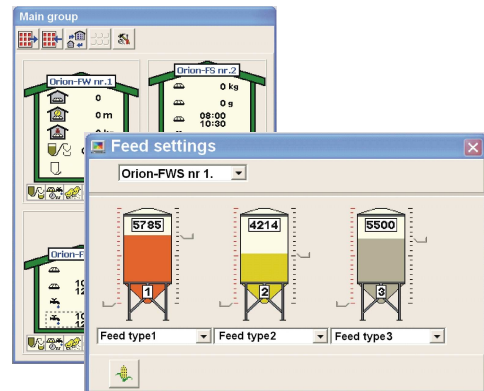
By using the CAN-Backbone communication, the Orion can be placed into a network consisting out of multiple Orion or Sirius computers. With an additional SmartLink, this network can be connected to a PC or modem.

Via RS232 the Orion can communicate directly with a modem or a PC, however, using the RS232 you can not create a network.



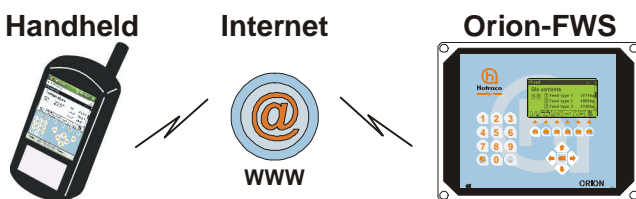
Orion-FWS and Rainbow+

By using the advanced communication module and the Rainbow+ management system, the Orion-FWS can be remote controlled from your home pc. Here too, user friendliness and graphic display were the points of departure. At a single glance the user gets an overall view of all his production houses, what systems in said houses are activated and if an alarm has been released in one of them.

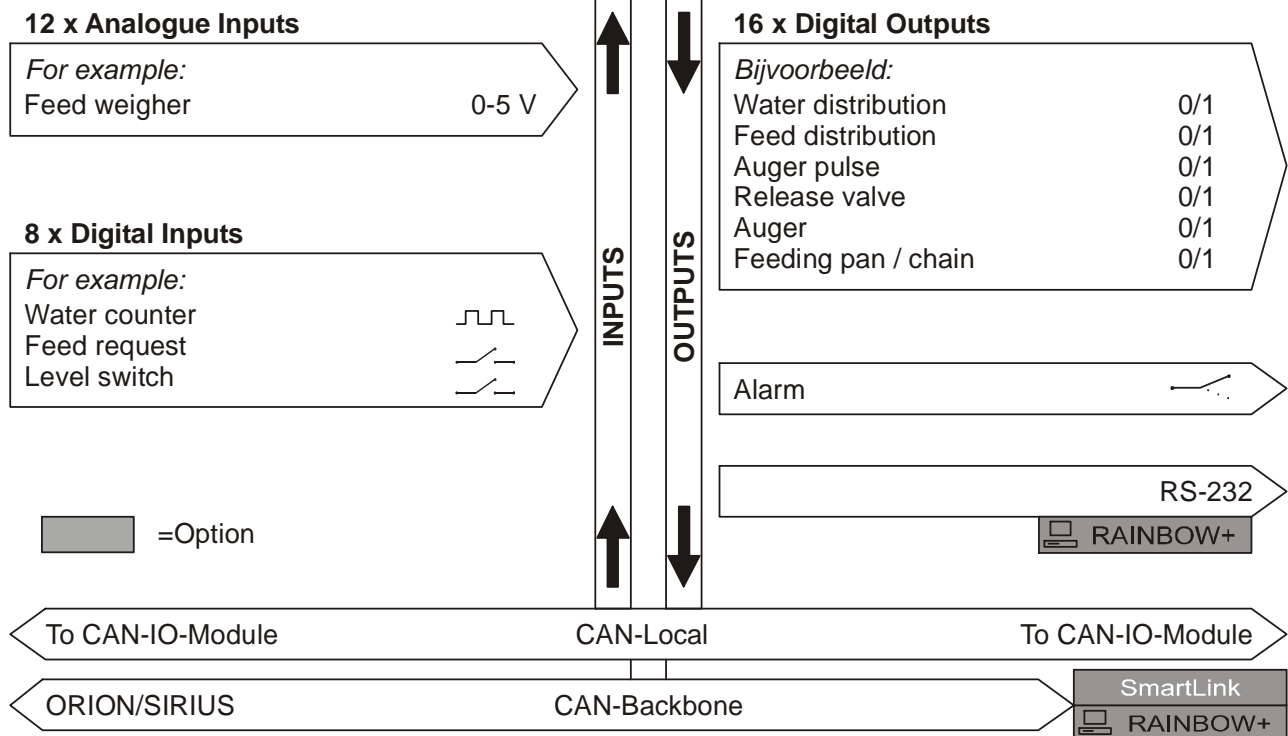


Orion-FWS and Remote+

With the optional Remote+ package it is possible to control your Orion computer by means of a handheld computer. The Remote+ software needs to be installed on your PDA, Smartphone or pocket-pc. Through the internet a connection between the Orion computer and your handheld needs to be established, by using the SmartLink-W. The Orion control panel appears on the handheld display, therefore the Orion operation on the handheld is completely identical to the Orion itself.



ORION-FWS feed weighing computer



Technical specifications

Electrical

Mains	: 230 Vac \pm 10% , 50/60 Hz
Power consumption	: max. 25 VA
Fuse	: T 500 mA (dim. 5 x 20 mm)

Analogue inputs

0...5 V	: 0-5 V ($R_i = \infty \Omega$)
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Digital inputs

Counter	: NPN / PNP sensor 12..24 Vdc 8 mA max. 10 Hz
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Digital outputs

Relay output K1...K16	: 0,5 A, 230 Vac
Alarm relay	: 0,5 A, 24 Vac/dc

Complies with EC directives

EMC	: 2004 / 108 / EC
Low tension	: 2006 / 95 / EC

Power 24 Vdc

Power	: 24 Vdc / max. 25 mA
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Power 12 Vdc

Power	: 12 Vdc / max. 100 mA
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Mechanical

Operating temperature range	: 0...40 °C
Dimensions (H x W x D)	: 270 x 345 x 115 mm
Encasing	: IP 54 synthetic
Weight	: approx. 4 kg